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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,334	05/04/2006	Kyung-Goo Kang	1599-0326PUS1	5694

2292 7590 01/21/2009
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EXAMINER

NGUYEN, THUY-AI N

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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01/21/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/578,334	Applicant(s) KANG ET AL.	
	Examiner THUY-AI N. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's responses filed on October 21, 2008 have been fully considered. Claims 1, 12- 22, and 24- 25 are amended. Claim 26 has been added. Claims 1- 26 are pending.

Responding to the claim amendments, rejection under 35 USC § 112 second paragraph of claims 12- 22, and 25 are withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1- 5, 7, 9- 10, 12- 20, and 23 - 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Vogt et al. (US. 6,274,570).

Regarding claim 1, Vogt et al. teach the microemulsion composition obtained from the diluting gel composition with water (claim 36) comprising metalaxyl (col. 3: 43-48), wherein the gel composition comprises polyoxyalkylene tristyrylphenyl ether (tristyrenephenol ethoxylate (col. 2: 1-5), calcium salt of alkylbenzene sulfonate, and solvents including lactone (col. 2: 1- 67), water miscible solvents including glycol, ethanol, pyrrolidone, and amide (i.e. dimethylacetamide and dimethylformamide) (col. 3:

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1- 13). The composition further comprises other nonionic surfactants or emulsifiers including castor oil ethoxylate and alcohol ethoxylate (col. 1: 60 – col. 2: 5), which do not materially affect the basic and novel characteristic of the claimed invention which are not excluded from the claim (*In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976), MPEP 2111.03 [R-3]).

Regarding claims 2- 4, Vogt et al. teach the microemulsion composition comprising the anionic form of polyoxyalkylene tristyrylphenyl ether (salt of tristyrenephenol ethoxylate), wherein the salt of the ethoxylate polyoxyalkylene contains from 8 to 30 moles of ethylene oxide (col. 2: 1- 12).

Regarding claim 5, Vogt et al. teach the composition, wherein the calcium salt of alkylbenzene sulfonic acid is the calcium salt of dodecylbenzene sulfonate (col. 2: 29- 34).

Regarding claim 7, see rejection of claim 1.

Regarding claims 9 - 10, Vogt et al. teach the composition, wherein the aqueous solvent are ethyleneglycol, ethanol, methyl-2-pyrrolidone, N,N- dimethylacetamide, and N,N- dimethylformamide (col. 3: 5- 13).

Regarding claims 12- 14, Vogt et al. teach the composition, wherein the pesticide (including the metalaxyl, col. 3: 14- 45) is present in an amount of from 10 to 90 percent weight relation to the volume of the composition (col. 4: 23- 28), which is equivalent to 10 to 90 percent by weight of the composition.

Regarding claims 15- 17, Vogt et al. teach the composition, wherein the aqueous solvent (or organic solvent, including water soluble solvent (col. 2: 54- col. 3: 13) is present in an amount of from 1 to 96 percent of the composition (col. 4: 28- 30).

Regarding claim 18- 20, Vogt et al. teach the composition, wherein the amount of emulsifier (surfactants) is from 3 to 80 percent of the composition (col. 4: 30- 35).

Regarding claim 23, Vogt et al. teach the composition as described above. Vogt et al. teach the composition comprising no pigment (dye) that meets 0 percent of pigment as recited by the applicant.

Regarding claim 24, Vogt et al. teach the microemulsion composition prepared by diluting with water (col. 8, claim 36).

Regarding claim 25, Vogt et al. teach the method for controlling plant disease by diluting the composition as described above with water and applying an effective amount of the dilution to the plant (col. 4: 58- 67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570).

Regarding claims 21 and 22, Vogt et al. teach the composition being diluted with water to obtain the microemulsion form (claims 36 and 39). However, Vogt et al. do not specifically teach the amount of water being added. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to optimize the amount of water being added to the composition to achieve the desired microemulsion composition. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claim 1 above in view of Flahive (US. 5,965,487).

Regarding claims 6, and 8, Vogt et al. teach the composition as described above. However, Vogt et al. do not teach the composition comprising dialkylsuccinic acid. Flahive teaches the herbicidal composition comprising sodium di-2-ethylhexyl sulfosuccinate, and dodecylbenzenesulfonate. Vogt et al. and Flahive are analogous arts because they are in the same field of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use sodium di-2-ethylhexyl sulfosuccinate, and dodecylbenzenesulfonate in the

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teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5- 30).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claims 1, 9, and 10 above, in view of Flahive (US. 5,965,487).

Regarding claim 11, Vogt et al. teach the composition as described above. However, Vogt et al. do not teach the composition comprising propylene glycol. Flahive teaches the herbicidal composition comprising propylene glycol. Vogt et al. and Flahive are analogous arts because they are in the same filed of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use propylene glycol in the teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5- 30).

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogt et al. (US. 6,274,570) as applied to claim 1 above in view of Flahive (US. 5,965,487).

Regarding claim 26, Vogt et al. teach the composition as described in claim 1, wherein the surfactants or emulsifiers include polyoxyalkylene tristyrylphenyl ether (tristyrenephenol ethoxylate (col. 2: 1-5) and calcium salt of alkylbenzene sulfonate (col. 2: 1- 67). However, Vogt et al. do not teach the composition comprising dialkylsuccinic acid. Flahive teaches the herbicidal composition comprising sodium di-2-ethylhexyl

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sulfosuccinate. Vogt et al. and Flahive are analogous arts because they are in the same filed of endeavor, namely, herbicidal composition. At the time of the invention, it would have been obvious to one of ordinary skill in the art to add sodium di-2-ethylhexyl sulfosuccinate in the teaching of Flahive into the teaching of Vogt et al.. The motivation would be to improve the dilution properties of the active materials (Flahive, col. 3: 5-30).

Response to Arguments

Applicant's arguments filed on October 21, 2008 have been fully considered but they are not persuasive.

According to the arguments of claims 1- 5, 7, 9- 10, 12- 20 and 23- 25, Vogt does not teach away from the present invention. Vogt discloses a gel composition comprising the said components which is substantially free of water; the amount of water is less than 0.5 percent. In fact, 0.5 percent is also the amount of water present in a gel composition. Although it is a small amount, water is still present in the composition, satisfying the claim 1 of the invention. In addition, in another embodiment Vogt discloses a microemulsion composition containing a larger amount of water from dilution the gel composition with water (col. 8: claim 36). In another part, Vogt discloses that the gel composition is diluting with water to obtain the stable composition in emulsion (col. 6: 19- 25).

Vogt not only discloses the composition comprising immiscible solvents, but Vogt also disclose the composition comprising the miscible solvents including ethanol,

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ethylene glycol, and N- methyl-2-pyrrolidone (col. 3: 7- 13, and in example 1, col. 5, and claim 1, col. 6).

According to the arguments of claims 21 and 22, Vogt discloses the gel composition being diluted with water and obtain the emulsion composition which is the stable and clear solution (col. 6: 20- 25 and claim 36, col. 8). Thus, during the experiment one would use the amount of water as said by the applicant to obtain the microemulsion state of the composition.

According to the arguments of claims 6 and 8, Flahive discloses a fungicidal composition which is used as agricultural chemical and Vogt discloses pesticidal composition which is used for combating pests and regulating plants. Flahive and Vogt are in the same field. Although they may have some different active ingredients, they have common components including solvents, and surfactant. For those reason, one would use the teaching of Flahive in the teaching of Vogt to improve the properties of the active material of the composition.

Because the applicant's arguments are not persuasive, claims 1- 25 stand rejected, and therefore made final.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is (571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

THA

/David Wu/

Supervisory Patent Examiner, Art Unit 1796